

# CommonWealth

Resource Management Corporation

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October 17, 2017

Municipal Review Committee, Inc.  
c/o Greg Louder, Executive Director  
395 State Street  
Ellsworth, Maine 04605

RE: Review of the Tip Fee for the Fourth Quarter of 2017

Dear Members of the MRC:

In October 2017, the Municipal Review Committee (the MRC) received from the Penobscot Energy Recovery Company (PERC) a calculation of the tipping fee for the fourth quarter of 2017 (the Quarterly Adjustment, which is provided as Attachment 1). The Quarterly Adjustment calculates a tipping fee of **\$ 79.50** per ton that would be in effect for (a) Charter Municipalities that have executed the Second Amended, Restated and Extended Waste Disposal Agreements (the Waste Disposal Agreement); and (b) other entities with contracts that use the Quarterly Adjustment as a basis for contract tip fees.

PERC supplied the following materials to document the Quarterly Adjustment: (1) loan interest paid in the quarter and projected for the upcoming quarter, provided as Exhibit A; (2) tons of and disposal costs for ash, glass and grit, non-processibles and ferrous materials on both a cash and accrual basis, provided as Exhibit B; and (3) tons of waste delivered for each month in 2017 for all customers, for each of the Charter Municipalities and other municipalities having disposal contracts with PERC; and for sources of out-of-state spot market waste, provided as Exhibits C-1 through C-3. PERC had separately provided monthly performance reports for its facility (the Facility) through September 2017.

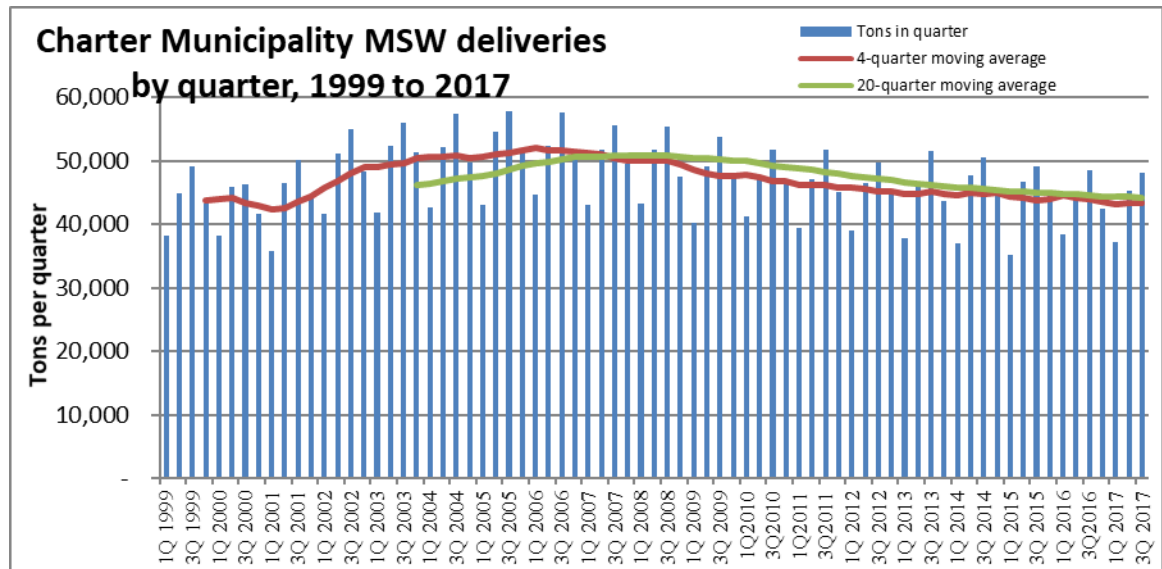
CommonWealth Resource Management Corporation (CommonWealth) has reviewed and duplicated PERC's calculations of the Quarterly Adjustment, and has reviewed various aspects of the performance of the Facility. This letter presents our review of the Quarterly Adjustment. Comments and recommendations on management of Performance Credits, Net Cash Flow and other MRC assets will be provided in a separate letter.

1. Charter Municipalities and tonnage data. Regarding the customer and tonnage data and estimates provided by PERC in Exhibit C:
  - Actual 2017 deliveries vs. 2016. The Charter Municipalities as a group are noted in Exhibit C as having delivered 48,119 tons of MSW in the quarter, including 47,819 tons of direct deliveries and 299 tons that were delivered by Pine Tree Waste as backfill for tons diverted from Charter Municipalities through new single-sort recycling programs. The 47,819 delivered tons represent a decrease of 431 tons (-0.9 percent) as compared to 44,297 delivered tons in the second quarter of 2016. The deliveries reported by PERC in 2017 to date represent 70.9 percent of the GAT for 2017 of 184,252 tons.
  - Equity Charter Municipalities. The Equity Charter Municipalities as a group, excluding backfilled tons, directly delivered 43,324 tons in the quarter compared to 43,657 tons in the third quarter of 2017 --- a decrease of 332 tons (-0.8%).
  - New Charter Municipalities. The New Charter Municipalities as a group, excluding backfilled tons, directly delivered 4,495 tons in the past quarter, as compared to 4,598 tons delivered in the third quarter of 2016 --- a decrease of 103 tons (-2.2 percent).

**MSW Deliveries to PERC in 2017 and 2016, tons by calendar quarter (excludes make-up tons)**

|    | Equity Charters |        |         |       | New Charters |       |        |        | All Charters |        |         |       |
|----|-----------------|--------|---------|-------|--------------|-------|--------|--------|--------------|--------|---------|-------|
|    | 2017            | 2016   | Change  | %     | 2017         | 2016  | Change | %      | 2017         | 2016   | Change  | %     |
| 1Q | 33,377          | 34,436 | (1,059) | -3.1% | 3,467        | 3,893 | (425)  | -10.9% | 36,844       | 38,328 | (1,484) | -3.9% |
| 2Q | 40,612          | 39,754 | 858     | 2.2%  | 4,459        | 4,542 | (84)   | -1.8%  | 45,071       | 44,297 | 774     | 1.7%  |
| 3Q | 43,324          | 43,657 | (332)   | -0.8% | 4,495        | 4,598 | (103)  | -2.2%  | 47,819       | 48,255 | (436)   | -0.9% |

- Deliveries of individual Charter Municipalities. The following Charter Municipalities had significant absolute or percentage declines in tonnage in the third quarter of 2017 compared to the third quarter of 2016: **Bangor, Bar Harbor, Blue Hill-Surry, Mars Hill, and Mid-Coast SWD** (Equity Charters); and **Knox, Stockton Springs, Sullivan, Tri-County SWMO and Wiscasset** (New Charters). The Charter Municipalities with the most significant increases in tonnage in 2017 over the third quarter of 2016 include **Fairfield, Glenburn and Rockland** (Equity Charters), and **Piscataquis County** (New Charters).
- Towns without Charter or long-term agreements. The long-term communities that have not yet switched to charter status (two as of the end of the quarter – **Burlington, and Lowell**) delivered 87 tons in the quarter. The host community of **Orrington** delivered 459 tons in the quarter. The Towns of **Ellsworth, Frankfort, Pittsfield, Prospect and Winterport** delivered 1,564 tons of waste in the quarter under successor arrangements to the OWL agreements. In addition, the Town of **Eastbrook** (99 tons in the quarter), the Town of **Greenville** (324 tons in the quarter), the Towns of **Nobleboro and Jefferson** (751 tons in the quarter), the Town of **Warren** (242 tons in the quarter) and the Town of **Willimantic** (18 tons in the quarter), are shown on the list of PERC customers on Exhibit C-1, but are not shown on Exhibit C-2.



- Out-of-state spot waste and supplemental fuel. PERC received more out-of-state spot market waste in the quarter than had been budgeted in the prior quarterly adjustment (2,130 actual tons vs. 2,024 budgeted tons). PERC received 10,952 tons of out-of-state MSW and combusted a total of 116 tons of wood chips for use as supplemental fuel in the quarter.
- Pine Tree Waste contracts. Pine Tree Waste delivered 17,545 tons of MSDW (other than backfill tons) in the quarter, of which 12,829 tons were in-state MSW and 4,716 tons were out-of-state MSW.
- Summary of sources of waste. PERC's sources of waste are summarized below:

|                            | 3Q 2017          |                | 2017 to date      |                |
|----------------------------|------------------|----------------|-------------------|----------------|
|                            | Tons             | Share of total | Tons              | Share of total |
| <b>Municipal waste</b>     |                  |                |                   |                |
| Charter Municipalities     |                  |                |                   |                |
| Equity                     | 43,324.19        | 53.9%          | 117,315.65        | 49.0%          |
| Recycling backfilled tons  | 299.30           | 0.4%           | 857.25            |                |
| New                        | <u>4,495.03</u>  | <u>5.6%</u>    | <u>12,418.40</u>  | <u>5.2%</u>    |
| Total                      | 48,118.52        | 59.9%          | 130,591.30        | 54.5%          |
| Carryover towns            | 87.47            | 0.1%           | 222.75            | 0.1%           |
| Other (OWL and short-term) | 2,997.08         | 3.7%           | 8,088.67          | 3.4%           |
| Host community             | 458.90           | 0.6%           | 1,239.72          | 0.5%           |
| Subtotal                   | 51,661.97        | 64.3%          | 140,142.44        | 58.5%          |
| <b>Commercial waste</b>    |                  |                |                   |                |
| In-state commercial        | 17,706.59        | 22.0%          | 57,288.24         | 23.9%          |
| Out-of-state               | 10,951.56        | 13.6%          | 42,122.76         | 17.6%          |
| Subtotal                   | 28,658.15        | 35.7%          | 99,411.00         | 41.5%          |
| <b>Total</b>               | <b>80,320.12</b> | <b>100.0%</b>  | <b>239,553.44</b> | <b>100.0%</b>  |

2. Actual residuals disposal costs. PERC's actual total residuals disposal costs for the prior quarter included in the tip fee calculation were 2.3 percent less than PERC had projected. The quantity of MSW received was 3.6 percent less than PERC had

projected, so the actual cost per ton of residuals disposal for the quarter was above the projected cost per ton. In particular,

- Actual costs for glass and grit disposal were 5.3 percent above the projections.
- Actual costs for ash disposal were 12.9 percent below the projections.
- Actual costs for landfill disposal of non-processibles included in the tip fee calculation were 23.1 percent above the projections. PERC began grinding some non-processible material into fuel in July and August and had stopped sending non-processible material to the landfill by the start of August. The cost of grinding the non-processibles for the for the second quarter, which had not been fully included in the prior quarterly adjustment for the second quarter, was rolled forward to the third quarter. The discrepancy in the costs reported in the previous quarter was resolved by accounting for a cost of \$35 per ton for all materials processed by the new grinder, and by accounting for the past accruals. Thus, the cost for disposal of non-processibles in the third quarter was somewhat elevated by the reconciliation of amounts not included last quarter. The cost for disposal of non-processibles is projected to decline significantly in the fourth quarter.
- PERC continues to have ferrous material removed at no charge, because the value of the material covers the cost of transportation to market.

CommonWealth agrees that PERC's calculations of actual passed-through disposal costs are reasonable.

3. Projected residual stream disposal costs. PERC projects the cost for ash disposal for the upcoming quarter to be \$720,000, equivalent to \$8.93 per ton of MSW to be received in the quarter. PERC projects the cost for glass and grit disposal for the upcoming quarter to be \$745,000, equivalent to \$9.24 per ton of MSW to be received in the quarter. PERC projects the cost for disposal of non-processibles for the upcoming quarter to be \$97,000, equivalent to \$1.20 per ton of MSW to be received. PERC projects no cost for disposition of recovered ferrous material.

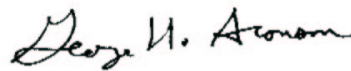
Overall, CommonWealth believes the costs projected by PERC for residuals disposal are reasonably consistent with calculations based on (1) the estimate of tons of waste to be processed in the upcoming quarter; (2) the generation rates of these residual streams in previous quarters; (3) actual unit costs for transportation and disposal of each residual stream in previous quarters; and (4) projected unit costs for transport and disposal of each residual stream in the upcoming quarters. Differences between estimated and actual costs will be reconciled in the next quarterly adjustments.

4. Changes in rate of interest cost. CommonWealth has reviewed PERC's calculations of the changes of rate of interest cost for the prior and upcoming quarters and agrees that the calculations are acceptable to the MRC. The calculations reflect the interest on PERC's outstanding bank loan from TDBank. The calculation no longer accounts for costs of three interest rate swaps purchased by PERC to reduce exposure to future interest rate increases, all of which have now expired. Overall, PERC paid interest, including the cost of the swaps, at a rate equivalent to **3.49 percent** in the quarter.

5. Reconciliation from the prior quarter. The Quarterly Adjustment includes a negative reconciliation amount of \$9,239 (about \$0.11 per ton) to reconcile PERC's actual costs with the basis for its tipping fee in the previous quarter. That is, the tip fee in the previous quarter was set \$0.11 per ton **greater** than what would have been required for PERC to recover exactly the amount it was due from the Charter Municipalities in the quarter. This reconciliation amount has the effect of decreasing the current tip fee to compensate for the tip fee in the prior quarter.
6. Environmental Performance. PERC reported one exceedance for emissions of carbon monoxide (CO) in the monthly performance reports received during the quarter.
7. CMRA Deposits: On August 23, 2017, PERC made a deposit of \$533,470.33 into the CMRA Fund for the preceding quarter. Such deposit was made as required pursuant to Article VII, Section I, of the Waste Disposal Agreement. OPEN
8. Format of the Quarterly Adjustment. The format of the Quarterly Adjustment and the associated documentation provided by PERC are reasonable and sufficient for reviewing PERC's calculations. The version of the Quarterly Adjustment received by Commonwealth did contain a certification from the Facility controller regarding the validity of quarterly pass-through costs as required by Schedule C, Section F of the Agreement.

Subject to the comments above, Commonwealth believes that PERC's Quarterly Adjustment for the fourth quarter of 2017 complies with the Waste Disposal Agreement and recommends acceptance by the MRC Board. If you have any further questions regarding the Quarterly Adjustment, please feel free to contact me.

Sincerely,



George H. Aronson, Principal

Attachment 1 Quarterly Adjustment Received from PERC

Copies: Bangor Hydro, PERC



## Penobscot Energy Recovery Company

29 Industrial Way  
Orrington, Maine 04474  
(207) 825-4566

ESOCO ORRINGTON, LLC  
Plant Operator

October 6, 2017

PERC Municipal Review Committee  
c/o Mr. Greg Louder  
395 State Street  
Ellsworth, Maine 04605

**Subject: Fourth Quarter 2017 Tipping Fee Calculation**

Committee Members:

Attached for your review is the fourth quarter 2017 Tipping Fee Calculation along with appropriate back-up information to support a "Charter Municipality" tipping fee rate of \$79.50.

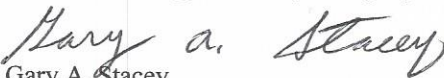
The information in Exhibits A through C, supplied herewith, along with the monthly Plant Performance Reports, should be sufficient to duplicate and verify the tipping fee calculation.

Also enclosed is a certificate, signed by the Plant Controller, certifying the validity of the quarterly pass-through costs for the quarter ending September 30, 2017.

Representatives from PERC will be available at your next board meeting to answer any questions concerning the new tipping fee and to provide additional information concerning plant operations.

If any questions arise in the interim please call.

Very truly yours,  
Penobscot Energy Recovery Company

  
Gary A. Stacey  
Plant Controller

Attachments:

Cc: G. Aronson, CWRM  
H. Lang, PERC  
J. Noer, SET  
K. Nordby, PERC Holdings



## Penobscot Energy Recovery Company

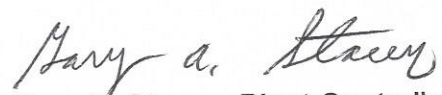
29 Industrial Way  
Orrington, Maine 04474  
(207) 825-4566

ESOCO ORRINGTON, LLC  
Plant Operator

### CERTIFICATE

The undersigned controller of Penobscot Energy Recovery Company ("PERC") states that he has reviewed the quarterly Pass-through Costs as presented on the tipping fee calculation quarterly reconciliation statement for the quarter ending September 30, 2017, that the quarterly reconciliation statement is a correct representation of the matters set forth and was prepared in accordance with generally acceptable accounting principles consistent with PERC's historical operating practices.

Dated: October 6, 2017

  
Gary A. Stacey, Plant Controller  
ESOCO Orrington, LLC, as Agent



## TIPPING FEE CALCULATION

06-Oct-17

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## TIPPING FEE:

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|  | 1st QTR '17<br>ESTIMATE | 1st QTR '17<br>ACTUAL | 2nd QTR '17<br>ESTIMATE | 2nd QTR '17<br>ACTUAL | 3rd QTR '17<br>ESTIMATE | 3rd QTR '17<br>ACTUAL | 4th QTR '17<br>ESTIMATE |
|--|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| TOTAL TIPPING FEE                              | \$64.02                 | \$64.02               | \$64.02                 | \$64.02               | \$64.02                 | \$64.02               | \$64.02                 |
|  | 1.50%                   |                       |                         |                       |                         |                       |                         |
|  | \$15.18                 | \$15.18               | \$17.18                 | \$17.18               | \$14.48                 | \$14.48               | \$15.48                 |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
|  | \$79.20                 | \$79.20               | \$81.20                 | \$81.20               | \$78.50                 | \$78.50               | \$79.50                 |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| TOTAL MSW DELIVERED (TONS)                     | 69,000                  | 74,224                | 81,914                  | 85,009                | 83,353                  | 80,320                | 80,625                  |
| CHARTER MSW DELIVERED (TONS)                   | 38,000                  | 37,198                | 43,500                  | 45,275                | 50,000                  | 48,119                | 42,500                  |
| CHARTER MSW FACTOR #1                          | 0.5507                  | 0.5012                | 0.5310                  | 0.5326                | 0.5999                  | 0.5271                | 0.5271                  |
| OUT-OF-STATE SPOT MSW (TONS)                   | 3,856                   | 6,688                 | 2,903                   | 4,763                 | 2,024                   | 2,130                 | 5,000                   |
| CHARTER MSW FACTOR #2                          | 0.5833                  | 0.5508                | 0.5506                  | 0.5642                | 0.6148                  | 0.6154                | 0.5620                  |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| PASSTHROUGH COSTS:                             |                         |                       |                         |                       |                         |                       |                         |
| CHANGE IN DISPOSAL COSTS                       | \$296,035               | \$297,202             | \$421,139               | \$367,097             | \$426,324               | \$403,381             | \$351,880               |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| SUPPLEMENTAL FUEL COSTS (RECYCLING)            | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| RECONCILIATION OF PREVIOUS QTR                 | \$5,435                 | \$5,435               | \$7,552                 | \$7,552               | (\$70,960)              | (\$70,960)            | (\$9,239)               |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| OPERATING STANDARDS CREDIT                     | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| CHANGE IN RATE OF INTEREST COSTS               | (\$7,897)               | (\$7,710)             | (\$5,548)               | (\$5,199)             | (\$3,893)               | (\$3,415)             | (\$1,413)               |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| AMOUNT OWED TO PERC IN QTR                     | \$293,574               | \$294,927             | \$423,143               | \$369,450             | \$351,471               | \$329,007             | \$341,229               |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| VARIABLE RATE CHANGE (C.I.L. COSTS)            | \$7.73                  |                       | \$9.73                  |                       | \$7.03                  |                       | \$8.03                  |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| VARIABLE RATE CHANGE (OTHER PASSTHROUGH COSTS) | \$7.73                  |                       | \$9.73                  |                       | \$7.03                  |                       | \$8.03                  |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| TOTAL VARIABLE RATE CHANGE \$\$\$/TON          |                         |                       |                         |                       |                         |                       |                         |
|  | =====                   | =====                 | =====                   | =====                 | =====                   | =====                 | =====                   |
| AMOUNT ACTUALLY BILLED IN QTR                  |                         | \$287,376             |                         | \$440,409             |                         | \$338,245             |                         |



## TIPPING FEE CALCULATION

06-Oct-17

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## TIPPING FEE:

## CHANGE IN DISPOSAL COSTS

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## RESIDUE DISPOSAL COST

\$368,188

## G&amp;G DISPOSAL COST

\$382,746

## FERROUS DISPOSAL COST

\$63,791

## NON-PRO DISPOSAL COST

\$79,737

## BYPASS DISPOSAL COST

\$0

## FEPR DISPOSAL COST

\$526,274

## TOTAL DISPOSAL COST

\$894,462

## CHANGE IN DISPOSAL COST (COST-BASE)

## CHARTER SHARE OF COSTS (FACTOR #1)

## CHANGE IN RATE OF INTEREST COSTS

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## ACTUAL TOTAL INTEREST FOR QTR.

## INTEREST CALC. @ 6.40% BASE RATE

## CHANGE IN RATE OF INTEREST COSTS

## CHARTER SHARE OF COSTS (FACTOR #2)

|                                     | 1st QTR '17<br>ESTIMATE | 1st QTR '17<br>ACTUAL | 2nd QTR '17<br>ESTIMATE | 2nd QTR '17<br>ACTUAL | 3rd QTR '17<br>ESTIMATE | 3rd QTR '17<br>ACTUAL | 4th QTR '17<br>ESTIMATE |
|-------------------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| RESIDUE DISPOSAL COST               | \$647,000               | \$709,911             | \$776,500               | \$727,621             | \$788,169               | \$686,813             | \$720,000               |
| G&G DISPOSAL COST                   | \$620,000               | \$581,918             | \$707,000               | \$713,898             | \$700,000               | \$736,919             | \$745,000               |
| FERROUS DISPOSAL COST               | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     |
| NON-PRO DISPOSAL COST               | \$165,000               | \$195,671             | \$204,000               | \$142,210             | \$117,000               | \$144,060             | \$97,000                |
| BYPASS DISPOSAL COST                | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     | \$0                   | \$0                     |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| FEPR DISPOSAL COST                  | \$785,000               | \$777,588             | \$911,000               | \$856,108             | \$817,000               | \$880,979             | \$842,000               |
| TOTAL DISPOSAL COST                 | \$1,432,000             | \$1,487,499           | \$1,687,500             | \$1,583,728           | \$1,605,169             | \$1,567,792           | \$1,562,000             |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| CHANGE IN DISPOSAL COST (COST-BASE) | \$537,538               | \$593,037             | \$793,038               | \$689,266             | \$710,707               | \$673,330             | \$667,538               |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| CHARTER SHARE OF COSTS (FACTOR #1)  | \$296,035               | \$297,202             | \$421,139               | \$367,097             | \$426,324               | \$403,381             | \$351,880               |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| CHANGE IN RATE OF INTEREST COSTS    |                         |                       |                         |                       |                         |                       |                         |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| ACTUAL TOTAL INTEREST FOR QTR.      | \$11,945                | \$11,484              | \$8,891                 | \$9,753               | \$5,587                 | \$6,370               | \$2,219                 |
| INTEREST CALC. @ 6.40% BASE RATE    | \$25,482                | \$25,482              | \$18,968                | \$18,968              | \$11,919                | \$11,919              | \$4,734                 |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| CHANGE IN RATE OF INTEREST COSTS    | (\$13,537)              | (\$13,998)            | (\$10,077)              | (\$9,215)             | (\$6,332)               | (\$5,550)             | (\$2,515)               |
| =====                               |                         |                       |                         |                       |                         |                       |                         |
| CHARTER SHARE OF COSTS (FACTOR #2)  | (\$7,897)               | (\$7,710)             | (\$5,548)               | (\$5,199)             | (\$3,893)               | (\$3,415)             | (\$1,413)               |
| =====                               |                         |                       |                         |                       |                         |                       |                         |